

PYROGENT® Gel Clot

Technical Tips

by Erin Ross

PYROGENT® Gel Clot Assay Kits are a popular choice for researchers and companies who wish to perform endotoxin testing without the need for quantitative results.

Technicians new to gel clot testing occasionally have problems getting positive results, which is often due to their accessory materials, equipment, or technique. Pyrogen-free glass dilution tubes (such as catalog #N207) must be used to make Control Standard Endotoxin (CSE) dilutions, because endotoxin adheres to plastics. Proper vortexing of the CSE vial and dilutions are necessary (see package insert for specific guidelines). Note that the CSE should be warmed to room temperature prior to use. 10 x 75 mm pyrogen-free glass reaction tubes should be used as reaction vessels whenever using multi-test LAL vials. Lonza recommends using catalog #N201 or #N205 with our gel clot products. A non-circulating water bath or dry heat block should be used to incubate the assay. Temperature should stay consistently at 37°C +/- 1°C for the duration of the 60 minute assay. Gel clot assays should never be run in incubators or warm rooms, as these will not provide direct, uniform heating of the reaction tubes. The water bath or dry heat block should be located in an area of the lab free of vibrations from nearby instruments, shocks, or other jostling.

It is important to handle the LAL reagent according to the instructions in the package insert. Reconstituted LAL should never be vortexed, either in the LAL reagent vial or after adding it to the reaction tube containing CSE or sample. Gently shake either the rack containing the reaction tubes or the individual reaction tubes to mix the contents, then immediately place in the water bath or dry heat block to incubate for 60 minutes +/- 2 minutes. Do not replace the water bath lid or disturb the bath in any way. Resist the urge to inspect the tubes before 60 minutes have passed, as this will disturb clot formation. After the 60 minute incubation, each tube should be gently inverted 180° in one continuous motion. Do not remove the entire rack from the water bath or otherwise move the tubes to

